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Speak Up or Sit Still? Using Student Voice and Service-Learning to Develop Self-Determination in High School Students with Emotional/Behavioral Disorders

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SPEAK UP OR SIT STILL?

USING STUDENT VOICE AND SERVICE-LEARNING

TO DEVELOP SELF-DETERMINATION IN HIGH SCHOOL STUDENTS

WITH EMOTIONAL / BEHAVIORAL DISORDERS

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CERTIFICATE OF APPROVAL

This is to certify that the **Action Research Final Project** of

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In his heart a man plans his course,

but the Lord determines his steps.

Proverbs 16:9

Abstract

Self-determined people possess the skills necessary to understand personal strengths and limitations and to engage in goal-oriented, self-regulated behavior that allows them to successfully take control of their lives (Field, Martin, Miller, Ward, & Wehmeyer, 1998). In contrast, students with emotional / behavioral disorders (E/BD) struggle to manage aggression, impulsivity, anxiety, mood swings, and other disordered thought processes (Minnesota Rule 3525.1329). One approach to helping students with E/BD become more self-determined is direct instruction in self-determination strategies. A majority of educators working with students with disabilities between the ages of 14 and 21 believe "promoting self-determination would be 'very helpful' to prepare their students for success in postschool life" (Wehmeyer, Agran, & Hughes, 2000, p. 63) and that self-determination may help students manage disabilities (Benitez, Lattimore, & Wehmeyer, 2005). However, claims of success are often drawn from teacher-led worksheet curricula inside classrooms rather than student-directed, real world applications.

Student led service-learning (i.e., projects co-created and directed by students that integrate meaningful community service with academic instruction and incorporate student reflection throughout the process) may provide students with self-determination skills that generalize beyond the school setting. Under the right conditions, participants in such hands-on, relevant apprenticeships improve their self-determination attributes of goal-setting and attainment, choice-making, and internal locus of control (Muscott, 2000). This study reviewed appropriate literature and employed student questionnaires, observations, and interviews to examine the value of student voice and service-learning to promote self-determination in high school students with E/BD.

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Chapter 1: Introduction

The Individuals with Disabilities Education Act Amendments of 1997 (IDEA 1997) were implemented in the United States to strengthen academic expectations for children with disabilities in our nation's schools. One of the main principles of this law emphasized the right to free and appropriate public education for every student. In 2001, the No Child Left Behind (NCLB) federal legislation raised the expectations for this public education, focusing on high standards for all students. A third law, the Individuals with Disabilities Education Improvement Act of 2004 (IDEA 2004) called for students with disabilities—including those with emotional / behavioral disorders (E/BD)—to be educated with their non-disabled peers to the greatest extent possible, consistent with the high standards of NCLB. This law encourages students to be educated in the "Least Restrictive Environment" (LRE), which for many students with disabilities means moving from special education resource classroom settings for part, most, or all of the school day into a general education setting where they can learn from subject matter experts as well as observe and practice socially acceptable behaviors from their non-disabled peers.

In theory, this inclusive education may have its benefits for students with disabilities (Carter & Hughes, 2005; Ryndak & Fischer, 2003). However, it may place students with E/BD in perilous territory where their label often leads general education teachers to anticipate emotional or behavioral outbursts or off-task behavior (Idol, 2006). Without necessary supports and accommodations, these students may have difficulty navigating the general education environment, unable to maintain focus seated in a desk for 60 minutes or more in crowded classrooms with lecture-style teaching methods that

may test the limits of their below grade level reading, writing, and listening skills (Danforth & Morris, 2006).

Students who qualify for special education services under the category of emotional or behavioral disorders must have:

> an established pattern of one or more of the following emotional or behavioral responses:
>
> A. Withdrawal or anxiety, depression, problems with mood, or feelings of self-worth;
>
> B. Disordered thought processes with unusual behavior patterns and atypical communication styles; or
>
> C. Aggression, hyperactivity, or impulsivity.
>
> The established pattern of emotional or behavioral responses must adversely affect educational or developmental performance, including intrapersonal, academic, vocational, or social skills; be significantly different from appropriate age, cultural, or ethnic norms; and be more than temporary, expected responses to stressful events in the environment. The emotional or behavioral responses must be consistently exhibited in at least three different settings, two of which must be educational settings, and one other setting in either the home, child care, or community. The responses must not be primarily the result of intellectual, sensory, or acute or chronic physical health conditions. (Minnesota Rule 3525.1329)

Students with E/BD are often challenged by the expectations for orderly, on-task, and silent behavior in general education classrooms. In resource or self-contained settings, they have highly-trained guides in the form of their special education teachers who use disability-specific expertise to manage unproductive student behaviors and employ differentiated curricula that utilizes students' strengths and are designed to improve students' reading, writing, math, and social skills. Such support is not always present in general education classrooms. At the same time, segregated environments often have lowered expectations for students with disabilities, which may increase the gulf between student behavior and their likelihood of success in general education environments (Meyer, 2001).

While NCLB emphasizes standardized testing and assessment tools to determine whether or not students are building required academic skills at an age-appropriate level and making Adequate Yearly Progress, there is no requirement for a research-based approach to instill the necessary self-determination skills that would teach these students to choose their own path and to plan for and adjust their progress toward personal success. With educators' best intentions, students with E/BD are subjected to a system that may inadvertently create dependence rather than independence. For example, whenever students with E/BD are enrolled in a general education math class at the suburban Midwestern high school where I am employed, it is standard procedure to place an adult paraprofessional in that classroom to support these students. This support professional may take notes and organize assignment schedules, externally control the students' engagement and behavior in class, and become an intermediary between students and the math teacher.

With reminders, homework help, and daily check-ins on her part, this paraprofessional is supposed to help these students pass math.

In fact, research (Giangreco, Broer, & Edelman, 2002) supports this observation in inclusive classrooms that often paraprofessionals are doing most of the work "situated in very close proximity to students with disabilities supporting them in instructional activities (e.g., providing support during large group lessons, tutoring, assisting with homework)." In doing so, the students may have limited opportunity to practice and develop independent, self-determined behaviors necessary to succeed beyond that classroom.

The resource or self-contained setting can be as susceptible to over-dependence on paraprofessionals (Giangreco et al., 2002). For example, as students with disabilities receive needed personal attention in a resource or self-contained setting for their math deficiencies, they may have smaller class sizes with a more advantageous teacher-to-student ratio, often with daily one-to-one work sessions where an adult walks a student through an assignment, problem by problem. As a result, these students often become dependent on this kind of attention for any kind of academic success. This dependence raises questions about how well students with disabilities are trained to succeed for life beyond these adult-directed environments.

Such issues are contrary to the 1992 amendment to the Rehabilitation Act. This law states that

> Disability is a natural part of the human experience and in no way diminishes the rights of individuals to live independently, enjoy self-determination, make choices, contribute to society, pursue meaningful careers, and enjoy full inclusion and integration into the

> economic, political, social, cultural and educational mainstream of American society. [Sect. 101.2 (a) (3)]

While the legal rights of persons with disabilities were clarified with this amendment, public school educators still struggle with the practical applications of these rights for students with disabilities.

One approach to helping students adjust to adult life is transition services. IDEA 2004 calls for the addition of a statement of transition services in the Individualized Education Program (IEP) for students with disabilities age 16 and older (although individual states, including Minnesota, start this process when students are 14 or younger). This provision, intended to involve students in the planning for their success after high school, opens the door to self-determination skills instruction. However, the focus on this area of transition may be lost in the deluge of special education requirements, including monitoring, Adequate Yearly Progress, and other concerns. Periodic observations or measurements may be overlooked as special education teachers juggle such priorities as curriculum design and application, classroom and caseload management, paperwork and reporting timetables, state and federal testing requirements, and district and building initiatives with the daily social and emotional needs of their students. Yet these observations and timely measurements would be quite useful to determine whether or not students are striving toward transitional goals throughout the school year. Thus, if self-determination skills could be merged with academic standards, it is possible that both academic and social growth could occur.

The arguments for self-determination instruction are compelling. Research indicates that explicit self-determination instruction that incorporates student-directed goal

setting, evaluation, and adjustment helps students become participants and determinants in their success in the adult world (Karvonen, Test, Wood, Browder, & Algozzine, 2004; Martin et al., 2003). Students with E/BD may be particularly in need of such instruction. A recent study (Carter, Lane, Pierson, & Glaeser, 2006) among students with disabilities reveals that students with E/BD have lower ratings of self-determination than students with learning disabilities (LD). It is likely that the gap is even greater between students with and without disabilities.

As defined by experts in this field (Field, Martin, Miller, Ward, & Wehmeyer, 1998), self-determination is "a combination of skills, knowledge, and beliefs that enable a person to engage in goal-directed, self-regulated, autonomous behavior." Wehmeyer, Sands, Doll, and Palmer (1997) noted that "the actions of self-determined people enable them to fulfill roles typically associated with adulthood" (p. 306). Essential factors of self-determination are a person's ability to recognize strengths and needs as well as his or her self-esteem or belief in oneself. Wehmeyer, Agran, and Hughes (1998) identify twelve interrelated component elements of particular importance to self-determined behavior (see Table 1 below), noting that these components develop throughout children's lives. While pointing out that some aspects are geared more toward high school and transition students, the authors assert that "promoting self-determination as an educational outcome will require not only a purposeful instructional program, but one that coordinates learning experiences across the span of a student's educational experience" (p. 309).

It must be noted that the terms *self-determination* and *self-advocacy* are often used interchangeably (Field, 1996, as cited in Test, Fowler, Brewer, & Wood, 2005). In most cases, however—and for purposes of this study—self-advocacy is seen as one component

of self-determination (Algozzine, Browder, Karvonen, Test, & Wood; Field et al., 1998; as cited in Test et al. 2005). Self-advocacy skills are "those skills individuals need to, quite literally, advocate on their own behalf" (Wehmeyer et al., 1998, p. 20). Self-determination encompasses a broader, complete skill set that allows individuals to take charge of their lives (Browder, Wood, Test, Karvonen, & Algozzine, 2001).

Table 1.

Component elements of self-determined behavior

Choice-making skills
Decision-making skills
Problem-solving skills
Goal-setting and attainment skills
Independence, risk taking, and safety skills
Self-observation, self-evaluation, and self-reinforcement skills
Self-instruction skills
Self-advocacy and leadership skills
Internal locus of control
Positive attributions of efficacy and outcome expectancy
Self-awareness
Self-knowledge

By nature of their disability, the classroom learning experiences of high school students with E/BD have become cause for concern. While most of these students spend some time in general education classrooms, they are included less often than students with other disabilities and their teachers are likely to feel unprepared to work with them

(Wagner et al., 2006) As their behaviors are viewed as inappropriate (i.e., breaking rules, non-participatory, upsetting staff and other students) and having a negative affect on the routine functions of the classroom, teachers and school administrators focus primarily on controlling the problem behaviors (Wehby, Lane, & Falk, 2003). Often, students with E/BD are referred to the office for disciplinary measures, which usually results in after-school detention, placement in an in-school suspension room, or being sent home. Attention to academic needs becomes secondary, and there is less time for discussion of transition and self-determination instruction. In 2003, the National Longitudinal Transition Study–2 revealed results for this population include "high rates of absenteeism, low grade point averages, course failure, and unacceptable levels of school drop out" (Wehby et al., 2003, p. 194). This predictable chain reaction may help explain why they struggle with "goal-directed, self-regulated, autonomous behavior."

There is a selection of curricula available for explicit instruction of self-determination, but most of these programs are aimed at students with disabilities other than E/BD (i.e., learning disability, developmental cognitive disabilities[1]). Also, this self-determination instruction centers on teacher-led, prepackaged pencil and paper scenarios. While practical, gains from such instruction may hold neither the attention of students nor lasting value in the real world because of their lack of authenticity and implicit marginalization of student voice in the process.

With its approach of involving student voice at all project levels, service-learning may provide a living laboratory to nurture self-determination skills by building on the strengths and addressing the needs of students with E/BD. As defined by the National Service-Learning Clearinghouse (2007), service-learning is "a teaching and learning

strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities."

Eyler and Giles (1999) point out that students who undertake service-learning projects set out to understand and solve real community issues and in the process gain deeper understanding and skills for themselves. Pritchard and Whitehead (2004) proposed a definition that integrates attributes from many resources including the 1993 National and Community Service Trust Act, the Compact for Learning and Citizenship (2001), and the National Commission on Service-Learning (2002) in a comprehensive definition:

> Service-learning is a teaching and learning approach that integrates community service with academic studies to enrich learning, teach civic responsibility and strengthen communities. It engages students in addressing real unmet needs or issues in a community and actively involves them in decision-making at all levels of the process. (p. 4)

Four overarching benefits of service-learning (Pritchard & Whitehead, 2004) incorporate the work of previous researchers and theorists and reveal its inherent possibilities and value to the field of education: enhanced intellectual development, increased academic achievement, strengthened citizenship education, and accelerated school reform. These top-level benefits are more explicitly examined in the literature review section along with a model for using service-learning that incorporates David Kolb's Experiential Learning Model (1984) and Herbert Thelen's Group Investigation Model (1972), which both include student problem-solving and decision-making, two elements common to service-learning and self-determination.

The purpose of this study was to extend available research by examining the value of student voice and exploring the impact of service-learning on the self-determination skills of high school students with E/BD and to gauge students' aptitude for service-learning. Through an examination of the literature, observations of students in current classroom settings, and individual interviews with participants, I looked for crossover points in the three strands of emotional / behavioral disorders, self-determination, and service-learning. I theorized that service-learning may provide a better path toward post-high school success for students with E/BD than either traditional teacher-led general education or remedial special education classroom curricula. As students drive service-learning projects in association with community partners, the nature of such projects requires students to take decision-making roles where they must practice self-determination skills (i.e., plan, act, evaluate, and adjust) to successfully design, develop, and guide each project through to fruition.

Implications of the literature are discussed in the next chapter, followed by my methodology and findings. Conclusions from the research are drawn, including applications and limitations, as I discuss possible outcomes for practice and reflects on the research experience as it pertains to his high-school students with E/BD.

Chapter 2: Literature Review

This section examines peer-reviewed resources related to transition and self-determination instruction, students with emotional / behavioral disorders (E/BD), and the value and use of service-learning, including empirical research and case studies published between 1997 and 2007. The review also examines Paulo Freire's approach to participatory learning and its possible applications for students with E/BD in developing self-determination skills.

Self-Determination

While much of the self-determination research uses subjects within other disability categories (i.e., learning disability, developmental cognitive disabilities)—or in the case of service-learning, non-disabled students—some studies focus on students with E/BD. Studies in self-determination examine available practices and provide data that reveal some positive real-world outcomes for students with disabilities—including students with E/BD—when they are provided an educational experience that incorporates service-learning and self-determination into academic instruction.

When examining the problem of preparing students with E/BD for life after high school, Benitez, Lattimore, and Wehmeyer (2005) built on the previous work of two studies involving self-determination models of instruction. In 1998, Mithaug, Wehmeyer, Agran, Martin, and Palmer developed the Self-Determined Learning Model of Instruction (SDLMI) to support teachers in their work of promoting self-directed learning in students with mild intellectual and developmental disabilities. Five years later, Wehmeyer and his colleagues (Wehmeyer et al., 2003) modified this SDLMI to focus on career and employment goals for adults with disabilities. This new framework, the Self-Determined

Career Development Model (SDCDM) was pilot-tested in the vocational rehabilitation system where four of five adult participants reached their self-designed employment goal. Benitez et al. (2005) built on previous results and used the three-phased SDCDM approach with a sampling of five high school students with E/BD. First, a specific, attainable career goal was established for each student and pre-test measurements were taken. Then an action plan to obtain the goal was designed including benchmarks and training for conflict resolution, assertiveness, and career exploration. Using a self-regulated approach of student plan reflection, progress evaluation, and plan adjustments, all students in this study were able to achieve target goals.

Limitations in this study include small sample size, the inability to collect data on long-range performance, and the means (pen-and-pencil rather than natural setting) of measuring success. Yet, through one-to-one meetings with the project facilitator three times a week over an eleven-week period, each participant gained self-determination skills using this model for students with E/BD. For example, one participant who had difficulty holding a part-time job due to anger problems was able to utilize the conflict resolution training, brainstorming, and practice scenarios to move from a first-phase score of 10% correct responses in a ten-step conflict resolution process emphasizing communication techniques to a third-phase score of 90% correct. Two other participants who were both working to improve their assertiveness used a four-component (refusal assertiveness, positive expressions, negative expressions, request assertiveness), eight-item rating scale to move from 12.5% correct responses in the first phase to 87.5% correct in the third phase. This study solidly contributes to the knowledge base of the possibilities for explicit self-determination training to improve post-high school outcomes for students with E/BD.

A similar study (Martin et al., 2003) utilized daily self-determination contracts to enable eight "skeptical" 9- to 10-year-old boys with E/BD to take control of their own learning. Although the students had average to above average intelligence, these boys tested academically one to three years below grade level. The self-determination contract format used consisted of four sections: plan, work, evaluate, and adjust. In the first phase of the study, the students' "independent practice academic period" instructor used a process of providing minimal instruction in use of the contract, telling students to determine and record when they would begin and end their work and to choose what subject they would work on that day. The teacher informed students that he would approve each plan, and if the amount of time and work that they chose did not match their instructional level, he would negotiate appropriate changes. The teacher also let the students know that using the contract would help them take control of their use of time during the class. Students understood that if they finished their work before the end of class, they could participate in individual or group recreational activities.

At the start of the sixth session, the instructor informed students that bonus points would be available for students who completed all sections of their contracts. Four days later, the teacher gave more explicit instructions on how to complete the adjustment section of the contract, clarifying for students when they had or had not met their goal as well as what options they had in those instances. After 24 days, the teacher informed the students that there would be no more bonus points, affirming the students' ability to complete the contract and sharing his expectations for them to keep doing so.

The results of the study show that the self-determination contracts helped these boys with severe behavioral problems to learn self-regulation skills while completing their

homework. Worth noting is the fact that when students received explicit adjustment instruction, they were better able to estimate their work expectations and to make appropriate planning choices. Also, as students got better at adjusting their workload and period, they became more persistent—even after the removal of bonus points. Ultimately, year-end assessments showed a one- to two-year increase in language, math, reading, and general knowledge for these students.

In a similar study in a high school, Carter, Lane, Pierson, and Glaeser (2006) attempted to measure and compare the capacities for and the opportunities to utilize and refine self-determination skills in students with E/BD and learning disabilities (LD). Surveys completed by a random selection of 85 students, their parents, and their special education teachers revealed perceptions that the self-determination abilities of students with E/BD are significantly lower than students with LD. It is interesting to note that the teachers' ratings of self-determination capacity for students with E/BD were even lower than the ratings of the students and their parents, demonstrating the biases many teachers hold against students with E/BD.

Regarding opportunities for self-determination at school, educators reported that there are more opportunities than students or parents reported. Although the sample size for this survey was notably small, results lead one to believe that self-determination efforts may not be a priority for students with E/BD. In fact, students and parents noted there were significantly fewer opportunities for self-determined behaviors at school for students with E/BD than for students with LD. While this study points to a need for school programming for students with E/BD to identify opportunities to build capacity for self-determination, it

recognizes its limitations such as the lack of input from general education teachers—who see many of these students in their classrooms—on their view of self-determination.

Wehmeyer and Schalock (2001) posited that a relationship existed between and the value of self-determination and quality of life in students with special needs. Calling on previous works by the authors and their colleagues, the point is made that a focus on self-determination will address the curricular and instructional needs as well as the quality of life for students. Referencing an appropriate analogy ["If students floated in life jackets for 12 years, would they be expected to swim if the jackets were suddenly removed?" p. 2], the authors emphasized the importance of teaching self-determination skills in order to appropriately prepare students for life after high school. The article proposed the definition of self-determination as "acting as the primary causal agent in one's life…" and provides a framework where the person acts autonomously, the action is self-regulated, and the person acts in an empowered and self-realizing manner.

Essential characteristics of self-determination, including choice-making, decision-making, and problem-solving skills, were laid out as well. The authors also identified criteria for the concept of quality of life in order to better understand the relationship between quality of life and self-determination for students with special needs, noting that limited empirical evidence exists that examines this assumption. Providing guidelines for self-determination instruction and assessment that will result in improving quality of life, the authors concluded that their assumption is an entry point for further discussion regarding the integration of special education and general education with a focus that leads to personally valued outcomes for all students.

Taking a look at instruction currently in place, a 2004 study by Karvonen, Test, Wood, Browder, and Algozzine examined six "exemplar" self-determination programs in schools in three different regions of the United States. Exemplar sites were identified using a sampling procedure known as "reputational case sampling" (Schumacher & McMillan, 1993). Using a list of 18 self-determination subject matter expert-nominated sites, the researchers conducted telephone interviews with a program representative and at least one participant's parent, and examined one IEP from each program. In this data, the authors looked for qualitative indicators for stakeholder perceptions of program success, the practices being used and self-determination components being taught, and the conditions that supported or impeded implementation of self-determination practices for students with disabilities. The goal was to identify programs with full range self-determination practices addressing as wide a range of students as possible. Although most sites in this study served students in grades 9 – 12, one addressed students in grades 4 – 8 and another addressed older individuals (ages 18 – 21). Two small (1 – 50), two medium (51 – 150), and two large (150+) student populations were served in these sites. The authors, who typically research issues concerning students with developmental and cognitive disabilities, provided valuable information that could be used by practitioners who work with different populations.

In the exemplar sites studied by Karvonen et al., students, teachers, and parents at each site answered questions related to what degree they felt the program was effective at building self-determination. Almost all respondents—students, parents, and teachers alike—expressed positive program outcomes such as students who pursued what they wanted and demonstrated self-confidence. However, there were a few examples illustrating

a less than successful program with such instances as a parent-teenager power struggle or an unwillingness of a student to stick with the program through the difficult parts.

The authors found that all six sites had three strategies in common: curricula to teach self-determination skills, teaching methods to enhance student participation in their educational planning, and non-instructional practices to build students' choice and decision-making skills. Teachers moved students through an informational phase into modeling and role plays and on into generalizing to other individuals and settings as students learned to request their own accommodations, practice job search and interview skills, and actively participate in educational planning. As part of their Language Arts course work, some students wrote their own IEP goals and objectives. To promote student decision making, teachers made sure that students knew and understood their options and were able to discuss benefits, drawbacks, and possible long-term consequences of their decisions. The authors identified an "impetus person," a program visionary, as the most common condition that supported implementation of self-determination interventions. The multiple roles of mentor, instructor, case manager, and/or counselor assumed by teachers were another positive support for these programs. Parents, too, were supportive at home, teaching their children to become self-advocates and supporting the teachers' position of taking responsibility for their own learning.

The authors note that further research is needed to demonstrate that all components of self-determination can be taught and learned. Also, the study recognizes that its subjects included students with a variety of disabilities; more research is needed with particular groups such as students with E/BD to determine the effectiveness of interventions across grade levels as well as from school to adulthood.

Taking a two-pronged approach to breaking down self-determination resources, Browder, Wood, Test, Karvonen, and Algozzine (2001) set out to assist teachers in utilizing what is already available. In their analysis, they carve one path through the conceptual literature, breaking out self-determination components, with a goal of better understanding. From choice-making and problem solving to goal setting and self-evaluation to self-advocacy and internal locus of control, the complexity of all the self-determination components must be fully understood before attempting to employ some curriculum. The authors point out many pitfalls, such as a study's particular cultural perspective or a consideration for balance between personal interests and forming relationships with others.

From there, a second path leads to self-determination interventions and curricula, examining the best ways to build these skills. Armed with a solid understanding of self-determination, teachers can study available resources, looking for validity, reliability, practicality, and usefulness indicators such as research support, applications for IEP goals and objectives, and strategies appropriate to a particular age group, disability group, and setting. The authors noted that, when considering self-determination curricula, practitioners should be aware of the limitations and challenges of using classroom instruction to simulate real-world situations. Also noted is the fact that most self-determination curricula have been developed for students with learning disabilities or developmental cognitive disabilities. Teachers working with students with E/BD will most likely need to make accommodations (e.g., more structure, adaptations to the materials) in order to apply current interventions.

In summary, the research examining self-determination in students with disabilities reveals many positive outcomes as teachers and facilitators work one-to-one or in small groups to identify individual needs and to guide students through meaningful goal design, attainment planning, and necessary adjustment steps to achieve life-changing progress. Through explicit step-by-step instruction, the door to independence opens as students begin to understand and practice self-regulation of behavior as they learn to make their own choices and decisions as well as attempt to solve their own problems. While studies using students with E/BD are limited in scope, evidence from small sample studies with this population, as well as empirical research examining students with developmental cognitive disabilities or learning disabilities, suggest that employment of self-determination interventions and curricula may lead to greater real-world outcomes.

What is lacking in the self-determination literature, however, was explicit research related to student involvement as *participant*, not *recipient* of self-determination programs. Although lacking in special education literature, the field of education is not without examples of students engaging in their own learning and directing their own outcomes. John Dewey's (1916, 1938) original education models provided far more authentic and empowered learning opportunities than are afforded students in contemporary schools. More recently, Paolo Freire's (1970/2000) work with Brazilian farm workers demonstrated that the learning process was one where the student engaged the teacher as much as the teacher engaged the learners. Freire's model of co-creation of knowledge is missing from modern "interventionist" approaches, but may be a valuable addition to existing programs that seek to help students become more self-determined.

High School Students with Emotional / Behavioral Disorders

Vital to the identification of any factors to improve transition outcomes of students with E/BD is a summary of available literature on their struggle within current high school designs as well as their post-high school success rates. As noted above, more research is needed specifically within this disability group to lend credence to positive self-determination education outcomes and how student leadership improves programming, but the studies presented below help to lay the groundwork for improved programming.

Among students with disabilities, Vander Stoep, Davis, and Collins (2000) discovered that adolescents with E/BD experienced the most significant difficulties in school and were 14 times more likely to drop out of or not finish school than their non-disabled peers. Also, within the age range of 18 – 21, they were four times more likely to not participate in post-high school settings (i.e., college, vocational school, employment) and three times more likely to have engaged in some illegal activity.

As researchers and educators develop promising transition programs for adolescents with disabilities, students with E/BD do not fair well. Examining the results of the National Longitudinal Transition Study (NLTS) and the National Longitudinal Transition Study – 2 (NLTS-2), Wagner, Cameto, and Newman (2003) report that students with E/BD continue to fall behind their non-disabled peers as they move into young adult life. Morningstar and Benitez (2004) reviewed the research to identify possible reasons why students with E/BD are not succeeding. They found that poor employment outcomes may be the result of the lack of coordinated services, inaccessible adult services, and poor state and local service policies as well as student characteristics such as poor opportunity for choice, poor problem-solving skills, and poor career knowledge.

Five years earlier, Morningstar, Kleinhammer-Tramill, and Lattin (1999) summarized best practices in transition services to include, among other practices, opportunities for self-determination and student involvement in transition planning and a focus on community outcomes when developing curriculum. These researchers identified in the literature the value of student voice as well as community focus in successful transition to adult life. Direct student participation in various work and community activities provides opportunity to make informed choices about their future. Also, when students have choice-making, relevant, problem-solving opportunities, it is essential that the adults guiding them provide an environment where they are allowed to make mistakes and to learn from them (Morningstar & Benitez, 2004).

Service-Learning

Service-learning may provide just such an environment where students with E/BD are given equal voice as well as the occasion to practice and develop self-determination skills as they problem-solve and make choices pertaining to community projects. Engaged in collaborative problem solving, students are given opportunities to build understanding and strengthen their thought processes (Pritchard & Whitehead, 2004). Learning becomes something tangible and meaningful outside the classroom walls.

According to the National Center for Educational Statistics (as cited in Billig, 2000), service-learning programs are present in about a third of all schools and half of public high schools. There are programs in all 50 states, with California and Maryland having established service-learning standards for all students. The philosophy behind service-learning can be traced back to the writings of Alexis de Tocqueville, John Dewey, and Jean Piaget who believed that "learning occurs best when students are actively

involved in their own learning and when the learning has a distinct purpose" (Billig, 2000, p. 659).

In a report from RMC Research Corporation (2005), positive academic impacts are evident in studies across the country. For example, as a result of service-learning projects, adolescent participants in Michigan reported a greater ability to pay attention to schoolwork and to put forth effort when compared to non-participants (Klute & Billig, 2002). Furco (2002) compared California high school service-learning students to peers who performed community service or no service at all. The results showed that the service-learning group scored higher on all academic measures than both groups, with statistically significant differences between the service-learning group and the no service at all group. At-risk adolescents in Delaware (Hecht, 2002) who participated in service-learning experienced increased enjoyment of and engagement in school.

In designing a collaborative service-learning model for use with middle schools and high schools, Pritchard and Whitehead (2004) incorporated elements from Kolb's Experiential Learning Model (1984) and Thelen's Group Investigation Model (1972). At the core of Kolb's model as well as service-learning is the tenet that "reflection transforms experience into new and usable understanding" (Pritchard & Whitehead, 2004, p. 11). Learning from experience is central to Thelen's model, calling for student collaboration in problem-solving and decision-making. These are component elements of service-learning as well as self-determination.

Pritchard and Whitehead's (2004) collaborative service-learning model begins with commitment where participants link an identified need to students' academic goals and their capacity to provide service. From there, goals are set and the service-learning team is

formed that cooperatively develops student outcomes. Next is the instructional planning phase where the team designs experiences that link service to learning, incorporating reflection throughout the process. Finally, in the evaluation phase the team analyzes project outcomes and celebrates new learning and student growth.

As noted above, recent research points to the relative effectiveness of service learning, but fails to consider the role of students in leading service learning projects. In an effort to bring student-centered approaches to service-learning, the research of Paulo Freire is reported below. Freire was not a service-learning scholar, but provided an enduring example of learner empowerment within the framework of education.

Paulo Freire

In his philosophy of education, Paulo Freire (1970/2000) criticized the dehumanization of an educational system where the teacher makes narrative "banking" deposits into empty students, filling them up with "motionless, static, compartmentalized, and predictable" knowledge (p. 70). Freire saw a flawed exchange where students were listening objects being acted upon rather than subjects doing the action. This banking concept of education presumes that the teacher knows everything and the students know nothing. Ironically, a system where students are mere receptacles of information minimizes the students' creative power as well as their ability to think critically. Essentially, students educated under this concept are ill-equipped to function as community leaders.

Instead, Freire insisted that the dichotomy of teacher and students be depolarized by changing traditional thinking about teaching and creating true dialogical exchange in order to practice:

> *co-intentional* education. Teachers and students (leadership and people), co-intent on reality, are both Subjects, not only in the task of unveiling that reality, and thereby coming to know it critically, but in the task of re-creating that knowledge. As they attain this knowledge of reality through common reflection and action, they discover themselves as its permanent re-creators. (p. 69)

Real communication between teacher and students must occur to create authentic reality. As Freire points out, "Only dialog, which requires critical thinking, is also capable of generating critical thinking" (p. 92).

Freire called this dialogical process of educational humanization a "praxis: the action and reflection of men and women upon their world in order to transform it" (p. 79). Instead of the 'teacher as authority' viewpoint, the terms "teacher-student" and "students-teachers" are used to represent joint and equal responsibility for all participants in the educational process. Freire's problem-posing and problem-solving participatory philosophy of education where teacher and students recognize that they live in a changing world that requires action is found in service-learning as we recognize it today. Student voice and action are imperative to identifying, understanding, and addressing problems in their community. This Freirean approach may be valuable in developed self-determination in students with E/BD.

Summary

The review of the self-determination literature reveals many successes when educators attempt to improve the skills of students with disabilities. Throughout the literature, however, study limitations raise questions as to how these successes with self-

determination curricula apply to students with E/BD. Recognizing the behavioral challenges this segment of the high school population presents to standard teacher-led methods, I pondered the effect student voice may have on authenticating the learning experience for these students and looked toward the service-learning literature for evidence of positive outcomes on participants' self-determination skills. Lending credence to this idea, Paulo Freire's work supports the value of student-teacher dialog in leading to critical thinking and the creation of true, practical knowledge.

The purpose of this study is to build on the relative empirical success of self-determination programs, but to assume self-determination education is a collaborative endeavor with students as evidenced in service-learning. Through the development of co-created self-determination activities, the author seeks to determine if self-determination programming can be enhanced by the addition of student voice in the process.

Chapter 3: Methodology

Overview

This study attempted to identify a relationship between student voice and the development of self-determination skills in high school students with emotional and behavioral disorders (E/BD). To do so, the study examined current instructional methods and settings used with students in this age group, sample curricula designs available today, and then incorporated student input in order to adapt available instructional methods to design a curriculum that plays to the preferences, strengths, and needs of these students and provides them the opportunity to solidify self-determination skills in the process.

This study utilized a multi-method approach, combining quantitative survey data with qualitative observations and interviews. Inside and outside student classrooms, data were collected in four stages. First, student participants completed a brief demographics survey and learning styles inventory. Second, I observed students in their scheduled classroom settings. Third, students were interviewed individually and answered semi-structured, open-ended interview questions and offered their perceptions on what works or doesn't work in recent or current classes. Finally, students participated in individual "think-aloud[2]" interviews where I listened to their thoughts as they read through two different lesson plans created in part with the results of the open-ended interview questions. At the end of the think-alouds, students offered their preference and supporting reasons for choosing one lesson plan over the other.

Research Participants

In a suburban school district north of Minneapolis, Minnesota, every high school-age student in three different programs who qualifies for special education services under

the E/BD category was invited to participate in this study. The 38 high school-age students with E/BD in this district participate in one of four different settings. Four students are educated in the mainstream general education setting with their non-disabled peers throughout the entire day. These students have a special education case manager who monitors their performance but does not interact with them on a daily basis. Most students with E/BD in this district participate in a mixed schedule of general education classes and resource classes. These students have some classes with their peers in the general education setting; however, the rest of their instruction takes place in a small resource classroom setting with five to ten students led by a special education teacher. Thus, 20-60% of the school day focuses on their specific areas of need (e.g., life skills math, communication skills, reading fluency). Students who are at higher risk of disruptive behaviors are in a self-contained classroom where all programming is delivered by one special education teacher. These students do not interact with their non-disabled peers. One student attends the district's Alternative Learning Center where they are educated among a variety of their peers—disabled and non-disabled—who, like themselves, are not successful in the regular high school setting.

Students with E/BD were recruited verbally during an information session. I explained that participation in the study was voluntary and that all information will be kept confidential. A consent form detailing participation involvement was signed by the parent or guardian of the students who participated. A student assent form, similar in design and content, was signed by each student participant in the study. Students who were 18 years old signed a consent form instead of an assent form. Item by item of each form was explained to students and adults. I assured participants and guardians that students will be

kept from harm and that all study information will be safeguarded in a locked cabinet in my home. Indirect benefits, such as co-designing a more appropriate curriculum and participating in improved programming, were explained.

As a result of these recruitment sessions, seven students agreed to participate in this study: one ninth-grader, one tenth-grader, two eleventh-graders, and three twelfth-graders. However, early in the study, before observations or interviews took place, one senior dropped out because he had scheduling conflicts due to detention and work obligations. Table 2 below depicts the remaining six participants: four males and two females, including one a ninth-grader, one a tenth-grader, two eleventh-graders, and two twelfth-graders. To protect confidentiality, pseudonyms are used for student participants.

Table 2.

Student participant profiles

Participant	Gender	Grade	Age	Time in General Education
Matthew	Male	9	15	80%
Brian	Male	10	15	80%
Patricia	Female	11	17	40%
Geoff	Male	11	18	80%
Devon	Male	12	18	80%
Shanice	Female	12	18	60%

Procedures

In the first phase of the study, students who chose to participate were asked to complete a demographic survey (see Appendix A) detailing their age, grade, ethnicity, living arrangement, and household income, and including a brief learning styles checklist

(see Appendix B) to determine learning preferences (e.g., visual, auditory, tactile / kinesthetic). According to Dunn and Dunn (1992), a learning style is the way each learner begins to concentrate on, process, and absorb new information. When students are aware of personal learning preferences, they may be more likely to advocate for differentiated instruction and assessment tools that play to their strengths and allow them to excel. Recognition of student tendencies and preferences in learning styles allows teachers to design curricula with a high level of awareness for these preferences and tendencies. Such curricula may lead to higher level of student engagement in their coursework.

The learning styles inventory used in this study was adapted from the Barsch Learning Style Inventory (Barsch, 1996) and Raynie's Sensory Modality Checklist (as cited in Gazda, Asbury, Balzer, Childers, & Walters, 1991, pp. 283-285). The inventory consisted of 24 'I' statements, each followed by a Likert-type scale containing the options of "Often", "Sometimes", and "Hardly Ever." Of the 24 statements, eight were designed with a physiological perceptual preference for each of three learning styles: auditory, visual, and tactile / kinesthetic. The data collected from the learning styles inventory and the demographics survey were charted in preparation for comparison analysis with observations and interview data in search of emergent themes.

Next, classroom observations were made of individual participants in their current educational environment, and careful fieldnotes were taken. The purpose of these classroom observations was to provide data to balance the participant-reported data of the survey and the interviews (Lincoln & Guba, 1985). As a non-participant observer, I watched each lesson from the back or a less visible area of the classroom with minimal disruption and gained realistic information about the behaviors of students and the

instructional styles of teachers. This method of observation was appropriate because it allowed for observation without disrupting the natural flow of activity in the classroom (Bogdan & Biklen, 1992).

Each participant was observed three or more times over a seven-week period in at least two different classroom settings. Each observation session lasted approximately one hour and incorporated the same research techniques. I entered the classroom before the lesson began and remained there throughout the main body of the lesson. The observation began by recording the physical characteristics of the classroom setting and the number of students in the class. Throughout the lesson, I recorded observations such as student contact with the teacher and other students, student body language and time on task as compared to other students, the practices and language of the teacher, lesson content, and management strategies.

During the classroom observations, two types of notations were recorded. First, I detailed actual observable events, refraining from filtering any information through my thought processes. Then, throughout the session, Observer's Comments (noted as O.C.) were made that included my attempts to begin to informally process or organize the data gathered. Often, these Observer's Comments identified lines of analysis for the data collected or questions about the data that I wanted to answer. I made pen and paper notes of observations and comments and then keyed them into Microsoft Word in preparation of codification by themes inherent in the data.

While reviewing and comparing the fieldnotes, I identified themes within each observation session. As each set of fieldnotes was processed this way, I honed in on

recurring emergent themes. As a result, successive observations keyed in on the specific student and teacher classroom behaviors and protocols that related to these themes.

In the third phase of data collection, each of the six student participants answered three semi-structured, open-ended interview questions with a follow-up summation question (see Appendix C). With semi-structured interviews, the researcher has the flexibility to offer the respondents some room to elaborate on their thoughts as needed while still maintaining a clear research agenda (Bogdan & Biklen, 1992). The interview questions were designed to elicit students' thoughts and opinions about what works for them in their current high school classes as well as their suggestions to increase student interest in the subject matter. All students answered the same questions, but additional questions were asked when needed for clarification. Also, students added personal examples to illustrate their points during these relaxed discussions.

Each face-to-face, semi-structured interview lasted approximately five to fifteen minutes, depending upon the student's willingness or ability to share thoughts and experiences. These interviews were captured by a digital recorder, and the contents were transcribed into Microsoft Word on the same day of each interview. Then I coded the interview transcripts for information relevant to any of the themes discovered during the observation phase. Also, student comments regarding what works or what frustrates them were marked for inclusion into the sample lesson plan designs to be used in the next phase of data collection.

Finally, students participated in individual cognitive lab interviews, or "think-alouds," where they literally talked out loud as they read through two one-page sample lesson outlines (see Appendices D and E). These lesson outlines were selected and

redesigned based on information observed in lessons, and they incorporated elements reflected in the participants' interview feedback. One lesson outline resembled a standard classroom design involving a teacher-led discussion, an informal student poll, reading an assigned fiction or nonfiction book, and writing a review of that book. The other lesson outline consisted of a student-driven service-learning project with many hands-on activities outside the classroom that incorporated community involvement and had plenty of room for developing elements of self-determination. After reading both lessons, I asked students to state whether or not they had a preference between the two lesson plans and, if they did, to provide their thoughts as to why they preferred one lesson over the other. Each think-aloud session lasted approximately 10 to 20 minutes. These one-on-one sessions were digitally recorded, word processed the same day, and later encoded for comparative analysis.

The use of verbalizations as indicators of cognition dates back to psychologist Karl Duncker (1945) who described these thinking out loud exercises as a way to understand a subject's development of thought. Ericsson and Simon (1993) agreed that think-aloud data collection is a valid method for researching cognitive processes as it draws on thoughts in the short-term memory where the conscious thoughts of the subject can be reported at the time they are processed. According to Ericsson and Simon, the cognitive processes that generate these think-alouds are a subset of the cognitive processes that generate behavior or action.

This type of data collection method recognizes advantages and disadvantages. Research data collected from the participant's short-term memory are preferable to thoughts generated from long-term memory where the information is often processed and

viewed through the lens of perception or experience. Ericsson and Simon (1993) noted that once information enters the long-term memory, the subject may incorrectly describe what he or she is actually thinking. Think-aloud verbalizations that are an integral part of cognitive processes are largely independent of interpretation by the subject (Van Someren, Barnard, & Sandberg, 1994).

However, this method asks participants to do something that may seem a bit odd or unusual to them. Asking subjects to think out loud may make them uncomfortable and cause them to self-select what they actually say. Also, think-aloud fragments of speech are often incoherent (Ericsson & Simon, 1993). To counter this, clarification questions can be asked after the think-aloud protocol is completed. Branch (2000) and Fonteyn, Kuipers, and Grobe (1993) demonstrated that asking such questions yielded valuable information that made the think-aloud data easier to understand and interpret.

Incorporating this information into this study, I prepared a script (see Appendix F) to explain the procedure to each student and then modeled the process using an alternate lesson plan outline. Then a digital recorder was used to capture each participant's think-alouds as well as any clarifying discussion that took place at the end of each session. When the participant was thinking aloud, I remained silent. If the participant did not say anything for 7 – 10 seconds, I cued him or her to "keep talking." Neutral cues such as this serve only to stimulate the process and do not corrupt data by introducing external ideas to the internal cognitive processes (Ericsson & Simon, 1993).

It is important to note that the participant's answers to any clarifying questions serve only to supplement any unclear data derived from the think-aloud verbalizations and are not the primary data source.

Analysis

The results of the demographics survey and learning styles inventory, two basic quantitative tools, were examined for similarities, differences, and patterns within the sample of six suburban Minneapolis high school students with E/BD. I looked for any information that may be helpful to identify student preferences for instructional and participation styles as well as to validate any data obtained during the observations and interviews. For example, if the results of the learning styles inventory revealed a preference for tactile / kinesthetic, I triangulated that data with classroom engagement observations as well as student responses to interview questions about what works for and what frustrates the student in his high school classes.

With the transcribed observation fieldnotes collected, I reviewed each page of the qualitative data carefully. During this process, each section was probed for possible themes or patterns in variables that appeared throughout each transcript. Data facts such as class size, room setup, time of day, teacher style, learning activities, and student engagement were encoded with brief descriptive labels. These coded sections were highlighted for comparative analysis with the next set of fieldnotes for that student as well as with the entire body of fieldnotes for all students. I analyzed the fieldnotes again to pull out major themes. From there, the data were compared to learning style preferences to identify any consistencies that substantiated the major themes in the observation data.

With these themes in mind, I conducted the semi-structured interviews with the participants in hopes of obtaining further insight into or corroboration of data gained from the learning styles inventory and classroom observations. The transcribed interviews were examined for evidence of the major themes found in the classroom observations and then

labeled with matching codes. I documented any consistencies in the interviews that supported these major themes and incorporated these elements of student voice into aspects of the lesson plan outlines used in the think-aloud sessions (Mills, 2007).

During the think-aloud interviews, I modeled the verbalization procedure for each student with the goal of collecting the purest data possible. Before proceeding with the actual thinking out loud, each student was encouraged to speak honestly, understanding that there were no right or wrong answers and that everything said would be kept confidential. I inspected the resulting interview transcripts for evidence consistent with professed student preferences in the previous phase of data collection and that supported data gathered from the learning styles inventory and the classroom observations.

Using grounded theory (Glaser & Strauss, 1967) as the basis for comparative analysis, I set out to "develop a theory that accounts for much of the relevant behavior" (p. 30) observed in this action research project. Based on my collection of coded data and the implicit understanding that this theory is a work-in-progress, I used my methods of data collection (see Table 3 below) to serve as a kind of progression that builds upon itself to compare and confirm any conclusions drawn. This triangulation of data strengthens the action research results (Wolcott, 1988). Within the data I searched for meaningful generalities regarding the role of student voice within curricula to build self-determination skills in high school students with E/BD. The following chapter details the findings that emerged from this data.

Table 3.

Types of Data

1. Demographics survey, learning styles inventory	Quantitative
2. Classroom observations	Qualitative
3. Semi-structured interviews	Qualitative
4. Think-aloud interviews	Qualitative

Chapter 4: Findings

The findings of this study are reported according to each step of the research progression starting with the demographics survey and learning styles inventory. From there, the classroom observations data are scrutinized, followed by the participants' viewpoints as expressed in the semi-structured interviews and think-aloud sessions. Next, the overall progression of findings is examined as it relates to major themes that emerged from the data gathered throughout the investigation. Finally, these findings are framed within my theory regarding the use of student voice and the prospect of service-learning to develop self-determination skills in high school students with E/BD.

Participant Demographics and Learning Styles

Six high school students with E/BD completed a participant demographics survey and a brief learning styles inventory. Within this population sample, survey results show more than one participant from each gender, various ages and household combinations, and each grade (ninth through twelfth) represented.

It may be worth noting that the participants' ethnic origin is limited to White[3] and African-American, and that no data were collected for total annual household income because not one of the participants could provide even an estimate. Also, the current educational setting of all respondents is part general education and part resource room. There are no students represented from the school district's self-contained program, all general education setting, or alternative learning center classrooms. Table 4 below contains the tabulated results of the demographics survey.

Table 4.

Participant demographics survey results (n = 6)

Gender		Ethnicity	
Male	Female	White	African-American
4	*2*	*4*	*2*

Age			Grade			
15	17	18	9th	10th	11th	12th
2	*1*	*3*	*1*	*1*	*2*	*2*

Current Educational Setting

Some classes in the general education setting, some in a resource room: *6*

Living with

Both parents in one home: *2*

My mother: *1*

My father: *2*

My foster family: *1*

Total annual household income

I don't know: *6*

Each participant's learning styles inventory was scored per the instrument's instructions (Barsch, 1996) using a 5 – 3 – 1 point system. Depending on the student's response to each of the 24 'I' statements, each statement was scored a 5 ("Often"), 3 ("Sometimes"), or 1 ("Hardly Ever"). The tallied results yielded a physiological perceptual

preference for one (or possibly two) of three learning styles: auditory, visual, and tactile / kinesthetic. As charted in Table 5 below, participant demographics data were combined with their responses to the learning styles inventory statements and totaled by preference for each learning style according to student.

Table 5.

Learning styles inventory results breakdown by participant

Student	Gender	Age	Grade	Ethnicity	Learning Style Scores
Matthew	M	15	9	White	AU: 26 VI: 28 **TK: 32**
Brian	M	15	10	White	AU: 26 **VI: 36** TK: 26
Patricia	F	17	11	White	AU: 22 **VI: 36** TK: 34
Geoff	M	18	11	White	AU: 26 **VI: 30** **TK: 30**
Devon	M	18	12	African-American	**AU: 40** VI: 32 TK: 29
Shanice	F	18	12	African-American	**AU: 30** VI: 26 TK: 20

AU = auditory VI = visual TK = tactile / kinesthetic

The learning styles inventory congregate results were also plotted by responses to statements (see Appendix G). This allowed me to visually identify similarities, differences, and patterns among respondents statement by statement.

For example, looking at the data in Table 5, Matthew appears to have a slight preference for a tactile / kinesthetic learning environment. Noting that he selected "Often"

after the following learning styles statements, I had a reference point for Matthew's preference going into the observation, interview, and think-aloud phases of data collection:

- I prefer to use posters, models, or actual practice, and I like some activities in class.
- I enjoy working with tools or making models.
- I play with coins or keys in my pockets.
- I grip objects in my hand during class time.
- I feel very comfortable shaking hands, hugging, or doing a physical activity with others.

Another possible reference point arising from this preliminary data concerned Shanice. Her auditory score of 30 suggested her learning style preference and a possible satisfaction with the standard lecture-style, teaching-directed learning. Also, her low score of 20 for tactile / kinesthetic anchored by her "Hardly Ever" responses to the following questions may support that conclusion as well as indicate a possible aversion to the hands-on, student-led learning tactics often associated with service-learning:

- I enjoy working with tools or making models.
- I play with coins or keys in my pockets.
- I grip objects in my hand during class time.

From the congregate response data in Appendix G for Patricia, I may conclude that she would be least likely among the participants to be satisfied with a traditional teacher-led, lecture style classroom as supported by her Auditory score of 22 and based on her "Hardly Ever" responses to the following questions:

- I do better at academic subjects by listening to lectures and tapes

- I would rather listen to a good lecture or speech than read about the same material in a textbook

Looking at Devon's responses, one may be led to believe that his Auditory score of 40, reflecting "Often" responses to all eight auditory-related statements, clearly defines this student's learning style preference. However, of the 24 statements, Devon selected "Often" for 17 of them. His Visual score of 32 is higher than all the scores of Geoff and Shanice, and it equals the high score of Matthew. Care must be taken with these data; only a fragile argument could be based on the findings of this instrument alone.

On their own, these learning styles results are merely indications or possibilities. However, when triangulated with observation and interview data, these and other conclusions for all six participants may be drawn with more confidence.

Classroom Observations

Observing the six participants intermittently in their scheduled classes over a seven-week period, student behaviors and teacher and environmental patterns emerged. Two themes appeared above all others throughout the observation phase:

- Standard, teacher-led classroom instruction was ineffective in engaging most of these students with E/BD for any length of time and seemed prone to creating systematic student dependence rather than independence.
- While most of these students with E/BD did not respond to standard, teacher-led instruction, some participated in their own manner, in ways outside the norm and often in spite of the teacher's instructions.

Below are summaries of these themes followed by examples from student observations to support them.

Standard, teacher-led classrooms = low engagement and student dependence

With a few exceptions, all sessions observed used teacher-led or teacher-driven learning methods in traditionally-designed classrooms. In these classes, students were crowded together in rows of desks or two-person tables. Often, students sat in their seats for 65 or more minutes of class facing the front of the room while the teacher directed instruction or they worked in their chairs on an assignment as instructed. The teacher drove the lesson, providing the questions, handing out the materials, and offering scenarios and external prompts or controls as needed. During teacher-led discussions, students could "get by" without participating or saying anything, knowing that either some other student or the teacher herself would answer a question or continue the discussion. When the lecture or teacher-led discussion portion of the lesson ended, the teacher told students when, where, and how long to work on their own. As a result, it appeared that students often were conditioned to depend on the explicit instructions of the adults in the classroom to regulate their actions, learning, or behavior in any activity.

Shanice demonstrated her ability to "get by" in her senior Economics class as the teacher recited review questions for an upcoming quiz, pausing briefly after each one so students could record their answers. After asking five questions, the teacher reread the first question and asked for volunteers to answer it. Shanice rested her head on her left hand, her elbow on the desk; and said nothing. Another student offered an answer. Then Shanice flipped back through a couple notebook pages as the teacher reviewed the next four questions. Shanice offered no answers to these questions. A couple female students near her answered; and when no one offered an answer to one question, the teacher gave the answer.

Later in that same lesson, Shanice showed how she used this teacher-led system to get the answers she would need to pass the quiz. As her teacher asked a series of questions, Shanice held her pen at the ready, but did not write. Beginning the answering session, Shanice wrote in her notebook when other students gave answers and the teacher confirmed and expanded on them. When another student asked the teacher to explain an answer, Shanice used that time to adjust her short ponytail. After the teacher clarified the student's confusion, Shanice wrote in her notebook again.

Observing that session, it was difficult to tell how engaged in learning Shanice was or how well she understand the subject matter being reviewed. However, she seemed to use her preferred auditory learning style to get the information she needed to study for the quiz the next day.

Even with the teacher's best intentions, Matthew struggled in his ninth-grade Physics class where students were grouped to summarize the results of a previous lab. The groups were designed for students to build off each other's understanding of a motion lab. However, Matthew demonstrated very little effort or engagement of his own and relied heavily on group members and the special education team teacher to get his work done.

For example, while the other two members of his group (two girls) talked briefly, Matthew said nothing. He wrote for a few seconds on his lab sheet and then gazed intently at the paper of the girl seated next to him. He began writing again, glancing over at the girl's paper a couple times. A few moments later, there was still no dialog between Matthew and his two partners. Matthew combed his hair with his fingers. As the girl next to him began using the calculator, Matthew and his other lab partner watched her. He looked around the room briefly, and then he tapped his pencil eraser on the lab table. The

team teacher approached the group's table and sat down at the empty stool across from Matthew. "Did you guys do the motion map?" she asked. With no response, the team teacher appeared to explain something, using her hand as she spoke. The girl next to her seemed to be listening; Matthew looked off to the right, his right foot up on the table crossbar. Then as the team teacher spoke again, he began writing something on his lab sheet.

About five minutes later, the team teacher checked in again with Matthew's group and specifically instructed them to get to work on their motion map. As she walked away and the girl next to him began creating the map on their small whiteboard, Matthew used the opportunity to copy from her lab sheet again.

In Brian's Core Math II, Patricia's Resource Study Skills, and in Geoff's Resource English, I observed that these students had developed an awareness for when they really needed to do what a teacher asked of them.

For example, the math teacher writes warm-up problems on the whiteboard in the front of the room each day. The expectation is that students begin working on these problems when class begins; some of Brian's peers were doing so each time he was observed. Yet, Brian did not begin working when class began. In fact, when the teacher explicitly asked students to "Please do the warm-up," Brian still did not begin. (The instruction prompted other late starters to begin, but not him.) Then the teacher stood at the whiteboard and asked for volunteers to come up and do one of the three warm-up problems on the board. Brian did not move. It wasn't until all three problems were completed (two by the teacher), two additional examples were worked through by the teacher, an individual work time limit of 15 minutes was set by the teacher, and the special education

paraprofessional checked in with him at his desk that Brian pulled out his calculator and began working.

As Patricia's Resource Study Skills class began, she immediately went to the computer and checked her e-mail. A few moments later, she glanced at the teacher who was busy talking one on one at her desk with another student. Then she found an Internet game site and began to play a carnival-style game. About five minutes later, the teacher approached Patricia. Sensing this, Patricia clicked open Microsoft Word. When the teacher asked what she was working on, Patricia said that she was looking for a current event for her World Studies class. The teacher reviewed classroom expectations with Patricia and said that she would check back in 20 minutes to see what work she had done. When the teacher walked away, Patricia opened another Internet Explorer window and typed in some text before returning to her game.

Observing Geoff in his Resource English setting, a similar pattern emerged. Seated in his desk in this class of eight students, he was focused on a handheld game. The teacher placed a worksheet on each student's desk and then returned to the front of the class. Noticing that Geoff was still using his handheld gadget, the teacher said "Hurry up now; come on." She tapped the half sheet handout on his desk a couple times. "Yeah, yeah," replied Geoff. As the teacher moved away from him, Geoff stayed focused on his electronic gadget. The teacher asked the group the meaning of a word, and no one volunteered an answer. The teacher explained the word's meaning and verbally gave an example of its usage. Geoff put down his electronic device, looked at his handout, and wrote something on it.

As these observations illustrate, these students do not seem to be engaged in subject matter learning or application in these general education and resource classroom settings. Lesson designs and guidelines are set for them, and they have very little voice in lesson planning, learning style options, or timelines that meet their needs.

Some students participate in their own way

When the teacher asked a question of the group during teacher-led instruction or discussion, some participants answered the question, but did not use expected procedures to offer an answer (e.g., raise your hand, wait your turn). Also, some of these students were able to stay tuned in to a discussion or participate at a different pace to get their work done while their physical behavior or activities appeared to be "off-task."

Geoff and Devon volunteered answers during class discussions. However, they did so in their own way, usually blurting out answers unexpectedly, revealing an ability to do two or more things simultaneously. For example, in his Basic Law class, Devon sat in the last row of the classroom of 30 students while his teacher led a discussion about a legal situation involving orphans. Six students had participated in the discussion, Devon being one of them. The teacher continued the discussion with a couple students in the front of the class. In the back of the room, Devon and his partner talked quietly about stealing. While I had difficulty making out every word, Devon said something about his dad, and then his partner replied. Then Devon said "Okay, you kleptomaniac." His partner stood up and took a step away from the table, saying loudly "I'm a klepto." A student involved in the conversation up front asked the teacher "What if you can't afford food?" Immediately, Devon commented on his question, "Oooo, that's a good point."

From there, Devon added valid comments to the discussion. At one point his teacher was visibly surprised that he was following along, knowing he was talking with his partner. His high Auditory score on the learning styles inventory and this observation example may be indications that Devon is not off task when talking and can excel through verbal discourse when utilized appropriately.

During an oral reading session in his Resource English class, Geoff did not follow along in the novel as other classmates or the teacher read. Yet, in spite of his appearance, he was tuned in to the story. For example, as a male classmate read slowly, decoding words carefully, Geoff worked an electronic gadget with his pen. When the boy paused, the teacher asked a question about the kind of women mentioned in the passage. Without looking up from his handheld device or raising his hand, Geoff blurted out "Sleazy." "Yes," the teacher replied. Then the teacher told the class that she would take a turn reading, and she began to read about New Orleans. When she mentioned "Bourbon Street" she asked "What kind of word is 'bourbon'?" Geoff blurted out "A drink" without looking up, eyes focused on his electronic gadget. The teacher approved and then continued to read aloud.

Seemingly off task to an observer, both Devon and Geoff were able to participate in class discussion at a certain level while conversing with a neighbor or playing an electronic game. Although not encouraged, their ability to participate in their own way seemed to be acceptable to their teachers.

Exceptions to teacher-led classrooms

As mentioned above, there were a few classrooms observed that were exceptions to the standard, teacher-led classroom design. In these classrooms, students seemed to have

more control in what they learned or accomplished during class. The summary examples below from fieldnotes taken in these classes offer varying degrees of student voice within class procedures.

In Patricia's American Literature class, students volunteered to read character dialog from two chapters of *The Great Gatsby*. Reading aloud was optional, and readers received no additional credit for reading; all students were held to the same level of accountability for chapter content in the form of a quiz that followed. There were eight or so character parts and the teacher did not assign any of her 24 students to a specific role. Taking advantage of this opportunity, Patricia chose to read Daisy, one of the main characters. As a result of this student input, the teacher experienced Patricia's ability to read with appropriate emotion and skilled inflection. Also, Patricia was engaged in the chapters even when others read their parts as she followed along in the text in preparation of her next line.

Another example of opportunity for student voice and choice was observed in Matthew's Resource Study Skills class. Two minutes after the bell rang, the teacher looked at the eight students seated randomly around the room. Some had begun reading or writing; others sat in their desks or at a large table. Then to no one in particular the teacher asked "What are we going to work on today?" Matthew was one of the students who had not begun working. The teacher sat down at his desk and, without saying another word, appeared to provide time for Matthew and the other students to decide what they would do. One by one those students made decisions regarding what they needed to accomplish during class. A student approached the teacher and asked if he could work with another student on history. "Sounds good," replied the teacher. Matthew needed to go to his locker

to get a different folder: "Go ahead," said the teacher. About 20 minutes later, the teacher visited with each student, answered questions, and commented on how well they were doing. During that class period, students were responsible for practicing the self-determination skills necessary for their sustained success.

Observing Geoff in his Woodworking class, I saw many self-determined students. Helping one another on the table saw, Geoff and another boy ran a board across the blade to make panels. Then Geoff brought the panels to a work table where he measured their fit across the top of a cabinet he was constructing. Proceeding through various steps of accessing necessary tools, consulting with fellow students, and using equipment, Geoff worked at his own pace to trim, slit, sand, adjust, and fit his top panel pieces to his cabinet. Throughout the class the teacher and a student acting as a teaching assistant moved around the room, available to answer questions, assist, or consult with students as needed as they worked at various stages of their individual projects. Geoff was focused, swift, and determined, consulting the teacher once and a fellow student twice as he efficiently constructed his cabinet top.

These learning environments worked well for these three students as teachers facilitated and they selected what worked best for them. These examples are a contrasting counterpoint to the highly teacher-controlled classrooms for students with E/BD.

Interviews and Think-alouds: Students Voice Their Views

The semi-structured interview questions were designed to elicit student responses about aspects of middle school and / or high school classes taken throughout their career that excited and frustrated them. Also, students were asked for their suggestions as to how teachers could make core curricula classes more interesting. In the think-aloud sessions,

students were encouraged to react out loud as they read through two sample lesson plans on the subject of immigration. Participants were asked to state their preference, if any, for one lesson or the other. While this thinking out loud process was easier for some participants than for others, these sessions corroborated some of the data collected in previous phases regarding learning preferences and the value of student voice.

Hands-on Learning

Reviewing the semi-structured interview and think-aloud transcripts, a theme emerged that hands-on, active, or experiential learning was preferred. For example, Matthew, Geoff, and Devon said their favorite classes were Gym, Woodworking, and Science respectively. They cited learning that is "hands-on" and "active" where you "go out and do things," work with props, and "get to do experiments." During his think-aloud session, Devon read out loud as he reviewed the service-learning lesson plan's elements. In doing so, he interjected thoughts that noted what he liked, such as the hands-on activities of decorating the lobby and making welcome kits for children.

When voicing their frustrations about their current classes, Matthew, Devon, and Patricia cited a lack of hands-on involvement or activities. Reflecting a common dislike for sitting and listening, Matthew commented that "It's hard to listen to a teacher talk for an hour" and Patricia said succinctly that "Lectures make me sleepy." Perhaps feeling the same sort of frustration, Devon noted how hard it was "sitting in the same desk, with annoying people all around you, looking at the same board, the same writing, the same book. It's all about books and curriculums and what you need to know." A lack of tolerance for the standard teacher-led method disengages these students from the learning process.

This preference for hands-on, experiential learning was reiterated during the think-aloud sessions when participants were asked whether or not they preferred one lesson design over the other. Three of the six students, Matthew, Patricia, and Devon, stated that they preferred the service-learning design over the standard lesson design. When asked to explain their preference, Devon and Matthew stated that this design was more "hands-on" learning. Matthew added that "it sounded like it'd be a little more fun" while Devon stated his distaste for learning that is "all about, like, books and stuff. I'm not into that type of stuff. Your head's just stuck in the book—it gets boring, dude." Using few words, Patricia supported her preference by saying that "you get to decorate stuff, and take photos. There's stuff to do." Also, Patricia noted that this lesson plan "sounds like more fun" than the teacher-led design she read.

Easy and Familiar vs. Too Hard and Service-Learning

Another commonality that emerged in the interviews and think-alouds was an apparent preference for work that is easy or familiar or a point where students believe that something is too hard. For example, when Brian and Shanice offered their perspectives on their favorite classes, they cited teachers who were "not very strict" or were "easy." Brian liked the fact that in his favorite class, Choir, this leniency was "a big drop in restrictiveness" compared to his other classes and meant that he could talk to friends while the teacher worked with other groups of students. Expanding on her preference for "easy" Shanice described her English teacher as someone who "helps us. If you asked her a question, she'd give you the answer." When thinking out loud about the sample lesson plans, Shanice stated that the teacher-led lesson "sounds more interesting, something that I'd do. The other one is too much work." She reiterated her preference for the familiar

when she reviewed the service-learning lesson design. Although she had trouble with the think-aloud process, Shanice seemed quite sure of her thinking when, after reading silently for some time, she said "It's a good idea, but I wouldn't do it. It's too much work."

The service-learning lesson design seemed to be an intimidating factor. Using the subject of immigration, the service-learning outline proposed partnering with the community and playing host to a new citizens' swearing in ceremony in an effort to improve understanding among cultures. This lesson evoked some comments that reflected confusion, discomfort, or surprise as participants thought aloud about elements that seemed foreign or unusual to their classroom learning experiences and attempted to compare them to something familiar.

For example, Matthew questioned "Is this, like, actually welcoming a new family? And new citizens?" Brian, too, verbalized his struggle to understand the academic connection to what he read:

> I don't really get what most of it's about. It seems like it's just—it's like a whole different, thing. It seems like, the whole thing would just be about, just like, setting up stuff for some new citizens. It doesn't really seem like much, except immigration.

As he thought out loud about the service-learning design, Geoff honed in on what he perceived as obstacles to successfully complete this lesson, summarizing clearly his reasoning for rejecting the lesson outline:

> Community involvement? Most people don't like to help… Arrange coverage by educational TV channel? That doesn't sound like something they'd be able to do easily…Setting up rooms, greet

> guests, interview new citizens, take photographs? So far the thing's asking a bit too much of the student.

During the same procedure, Devon remarked that some tasks of the service-learning outline would be easy while he thought that others such as journal writing and establishing partnerships with the community would be too hard or too much work. Voicing his preference for the teacher-led lesson design because it was "doable," Geoff stated his belief that students would not be able to do the service-learning design without "a lot of support and effort from students and other people." Overall, the service-learning design seemed unfamiliar and somewhat intimidating to most of the participants.

When describing a favorite class, Patricia's response echoed a certain comfort with the familiar: "Maybe English, I don't know. I like to read something and then get a worksheet and look back and write down the answers. I don't know. Sometimes I like to read." Her answer seems to reflect a process that she is probably all too familiar with in her special education experiences. Yet, in choosing the service-learning design as her preference, Patricia proved willing to latch on to unfamiliar hands-on tasks that "sounded like more fun."

As Brian weighed the merits of each lesson design in the think-aloud session, his comments seemed to reiterate his preference for the easy or the familiar. He liked the service-learning design because "there's hardly any writing." However, he favored the teacher-led lesson because "you don't have to, like, set up a bunch of stuff." In the end, Brian could not decide which lesson he preferred.

Teacher-Student Communication

When discussing things that may frustrate participants in their current high school classes, Geoff and Shanice had something in common involving teacher-student communication. Geoff said he gets frustrated when teachers "give you a lesson and they don't really explain it to an extent where you understand what you really need to do." Shanice commented that sometimes a "teacher gives us directions but she doesn't really help us" adding that "she'll tell you what to do instead of show you. You have to show me what to do." This commonality may reflect more on the students' inability to self-advocate for further explanation, examples, or clarification rather than the teachers' inability to communicate.

When asked about his frustrations with classes and how teachers could make classes more interesting, Devon replied that he does not like "teachers who think they know it all" and "make a kid's life feel like hell. He ranted about relationship, adamant that "teachers should chill out a little more, be more laid back, be yourself, actually interact with kids." Also, he insisted that "if learning's not fun you can't get it done." He added that teachers should "do what they need to do to make a student learn. Not, like, set rules. Form a bond, and joke and laugh about it. Make it fun—make people want to learn."

Relevance

Given the opportunity to suggest ways to raise the interest level in his classes, Brian's response reverberated with the importance of relevance in keeping him engaged in a lesson:

> Classes can be interesting; it depends on what it is. If it's like 'Simplify these radicals', oh, that's boring. But if it's something you

> can use later on, even if it's something really tiny, really easy to understand—if it is even the least bit useful, it would be interesting. Or if it relates to something you know about, it's interesting.

Echoing the importance of relevance, Geoff suggested students learn "what we really need to know for when we get out of school…and what we could use in real life."

Variety and Student Voice vs. Boring Routine

Sprinkled throughout the responses of Matthew, Patricia, Geoff, and Devon were messages about routine versus the value of variety and the use of student discovery, voice, and choice. Reflecting on the frustrations of listening to his Physics teacher lecture about gravity, Matthew suggested that the teacher "let the kids all figure out how gravity works on their own. I'd send 'em outside and tell 'em to jump off things and see how fast they fall." Taking student involvement into the area of student design, Patricia said that teachers should "give us opportunities or different ways to do it ourselves. Like, we could make our own worksheets, or our own labs or something. Choose our own books, or choose what math we wanna look at, to our standards."

Variety, rather than status quo, was at the heart of Geoff's suggestion to "do something out of routine. Don't go with the same boring schedule as always. Same lessons, textbook stuff." Also, when thinking out loud as he read the teacher-led lesson design, Geoff was quite concerned about the fact that the book to be reviewed by each student was to be selected and assigned by the teacher. He was also concerned about who would receive a fiction and who would receive a nonfiction book. He wanted a say in the matter and stated strongly that "students should be able to choose their own book" as well as whether they prefer fiction or nonfiction.

Devon described his exasperation with routine differently, though with similar frustration: "Aw, man, I'm doin' this again, yo? Oh, God, Chapter Six? Oh my God!" Reiterating the importance of variety, Devon and Matthew suggested that students go outside for class once in awhile. Devon found lasting value in doing this: "You get exercise. You come back more awake."

In summary, the interview questions and think-aloud sessions yielded valuable data containing some commonalities among the six participants. Three of the six students expressed a preference for hands-on or active involvement in lessons while two of the participants looked for an environment with less restrictiveness where tasks were easy. When given a choice, three students stated a preference for the service-learning lesson design, two students preferred the teacher-led classroom design, and one student was undecided. One student's preference for the teacher-led design was conditional on the fact that he, rather than the teacher, would have a voice in selecting his own book to report on. Students who were wary of the service learning approach were afraid of the amount of work involved with service learning. This finding runs contrary to contemporary educational research and policy that supports standard education as the most rigorous. Students were not afraid of the engagement piece of service learning, but of the amount of commitment expected of them. This finding echoes interview data that demonstrated that some students prefer schooling that is "easy."

Two common frustrations among participants included sitting disengaged in a desk in a classroom while teachers lectured and teachers giving verbal instructions without ensuring student understanding. Also, students noted two common factors to improve student interest in learning: a lesson's relevance to their lives as well as a variety of

approaches to learning including the use of student discovery, voice, and choice in materials or activities. When triangulated with other data collected, these findings may support the value of incorporating student voice to improve learning in high school students with E/BD.

Overall Results

Patterns emerged from the participant responses and observations throughout the four phases of data collection. Four of the six participants consistently stated a preference for a hands-on approach where student voice, choice, and interactive discovery are integral to learning. In fact, varying degrees of student voice were important to *all* participants. While some students were content with having input into which book they read, others preferred more voice in the aspects of day to day learning including learning environment, tasks, and methods. An increased level of student voice in the learning process seemed likely to result in improved student engagement and, in turn, greater opportunity for developing multiple elements of self-determination.

Three participants who stated a preference for hands-on learning voiced frustration specifically with the teaching-led method where students sit in desks listening to teachers lecture. When observing these students in this type of classroom setting, this frustration seemed to manifest itself as students fidgeted in their desks, played with objects in their hands, or got involved in off-topic, side conversations.

While three of the six participants were more likely to accept lengthy reading as part of a lesson sometimes, the other three participants stated a general dislike for reading books selected by the teacher and then writing about them. Two of the six participants specifically named learning that is relevant to real life as a high interest factor while four

participants complained about teacher-led classroom routines, longing for variety in learning approaches and activities.

Four of the six participants had some level of contentment with standard classroom procedures where students are part of a teacher-led group. This segment of students was not consistent as to why they prefer this approach. Some liked the familiarity of the simple methods and expectations while others found comfort in the ease of working within or getting by in this system.

Finally, there is a steep service-learning curve for these students. Some tasks in the cycle of service-learning seemed impossible to accomplish or unrelated to learning when compared to their usual worksheet or textbook and testing frame of reference. These attitudes were reflected during the interview and think-aloud sessions where four of the six participants referred to a personal reference point where assignments became "too much work" or "too hard."

Chapter 5: Implications and Conclusion

Findings and Theory

Framing these findings within my theory regarding the use of student voice and the prospect of service-learning to develop self-determination skills in high school students with E/BD, the research data indicate the strong possibility of this approach having a positive impact on the level of interest and engagement in the majority of these students. As a result, the opportunity to build self-determination skills would be present throughout a curriculum designed to incorporate student-voice and choice.

However, two caveats to this approach are evident in this study. When given a choice between a service-learning project and a teacher-directed classroom lesson, a minority of the participants clearly preferred the latter. This may be the result of being subjected to years of the standard, teacher-led, student-fed methodology. When the familiar is a requirement to be a recipient and memory bank of information, there may be a kind of calming comfort in that black-and-white, structured approach. These students may never have known anything else. Asking them to move on to the next level of co-created design may be risky and frightening, and might be contrary to the "easy" education for which some students expressed a preference. Proponents of a teacher-guided, student-led, community-partnered approach must work hard to overcome students' fears.

Also, for most of the participants, the service-learning cycle seemed unrelated to "school" as they know it. Some high school students with E/BD trained in a teacher-centric classroom system throughout their academic lives may expect learning to be teacher-driven and compartmentalized within manageable 60-minute segments. They have learned that school is a place where they use calculators, pencils, and paper to do math in one class;

read books and write papers in their English class; and often look outside themselves (i.e., ask teachers and other adults for help in finding the right answer or information) to pass these classes. The idea of choosing roles that suit their strengths and needs, designing each step of the learning process, and involving off-campus entities was too difficult, too much work, or next to impossible for most students. But under the right circumstances, students who struggle to manage their behaviors and emotions may learn to believe in their potential for success. Having input into the learning process may provide sustained engagement and ultimately yield improved self-determination skills. The students-teacher-community critical thinking framework may need to be taught explicitly in order for students to get full value from this new paradigm and have the opportunity to graduate high school self-determined young men and women.

The findings of this action research study contribute needed data to the limited knowledge base of approaches to academic and post-secondary success for high school students with E/BD. Specifically, the research shows some evidence of the positive effect student voice may have on all students' ability to actively engage in learning. Also, a hands-on, service-learning style curriculum where student voice and choice permeate the design was favored by a majority of participants over standard teacher-led instruction. While stepping outside the teacher-led classroom box is uncharted territory for these students, some are more willing to go there than others. Yet, when facilitated properly, such a curriculum seems likely to improve students' long-term success through the development of self-determination components inherent in the service-learning co-design.

Any challenges to implementing this student-directed curriculum are not insurmountable. Proponents for the use of student voice and service-learning to improve

post-secondary outcomes of students with E/BD point to evidence of students' low success rates within present systems and methods (Vander Stoep, Davis, & Collins, 2000). Education professionals can build on the findings of this action research that support the fact that most of these students preferred hands-on learning injected with student ideas and choices. When teachers practice Freirean methods (1970/2000) where students are valid contributors to the learning process and the construction of knowledge, curricula for high school students with E/BD can be filled with opportunities to develop the self-determination skills necessary to become successful members of their community.

Implications of Findings

With the findings of this action research project, high school educators working with students with E/BD have some data to support alterations to the daily routine of teacher-led lesson plans. While this method of instruction monopolizes the high school classroom, many students with E/BD sit disengaged in uncomfortable desks, avoiding participation and waiting for the bell to ring. Whether in general education or resource classrooms, teachers do most of the work as they explain some vital concept or lead a topical discussion. Students seem to have learned a dependence on others or the classroom process itself to do the basic requirements asked of them. This one-way thinking does not utilize the untapped power of student participation and may not provide enough opportunity for authentic learning.

Educators must find ways to incorporate student voice and hands-on activities into daily lessons if they want to engage students with E/BD in subject mastery as well as self-determination skills development. Although, as noted in Chapter 2, some students with special needs (e.g., students with learning disabilities or developmental cognitive

disabilities) have been successful in improving self-determination skills using prepackaged pencil and worksheet lessons, Browder et al. (2001) warn of the challenges in extending that classroom success to the real world as well as to students with E/BD. The findings of this action research support those challenges.

Based on the conclusions that there is educational value in student voice and that many students with E/BD prefer variety and hands-on activities, educators need to offer more student-driven learning opportunities. If given opportunities for input into lesson designs, these students may exceed teacher expectations and engage in the learning process as intently as they do in conversation and electronic games. Also, considering the findings that some students understand "school" as something contained within the classroom walls, it is vital to broaden this limited perspective of learning in order to promote applied understanding in their lives and improve the likelihood of lifelong learning and success for this population.

Further research is needed to better understand students with E/BD and the opportunities they have for developing self-determination skills in high school classrooms. To validate and build upon the findings of this action research project, additional qualitative data studies with similar students with E/BD in other high school settings and locations must be undertaken. Also, empirical research must be conducted with large, diverse sample sizes that incorporate a broad base of high school locations and students with E/BD in various regions throughout the country. Scores of students need to be interviewed and observed in academic settings to identify emotional and behavioral tendencies and learning style preferences. Also, special education and general education teachers who work with students with E/BD must be interviewed and observed to

determine classroom teaching styles and methods as well as the use of variety in delivery and assessment and the frequency of opportunities to utilize student voice and to incorporate hands-on activities. Additional qualitative research will return a richer theoretical understanding about the learning process of students with E/BD and their strengths and challenges within the high school system. Empirical studies within this framework will return quantifiable data that may substantiate these implications for this less than successful segment of students with special needs.

In this action research project, I theorized that service-learning may address the preferences of students with E/BD and provide an avenue for developing self-determination. However, the results show that service-learning may push some students—and probably some teachers—out of their comfort zone. Therefore, if service-learning is to be used as a living laboratory to promote self-determined behaviors in these students, it is important that program facilitators design standards for quality practice and train and prepare all participants to adhere to these standards. This is a process that requires support from willing and available service-learning mentors as well as buy-in from administrators, educators, and students.

This action research project has demonstrated the value of student voice for students with E/BD to build self-determination skills through service-learning. Although theory is grounded in empirical data, I acknowledge possible limitations to the findings in this study that student voice plays an important role in developing self-determination in students with E/BD.

Limitations

Being an action research project, this study is designed to address specific issues with students under the care and guidance of the teacher-researcher in one high school setting in hopes of improving their success in school as well as throughout adulthood. Therefore, the findings are not intended to be generalized to all high school students with E/BD. The six student participants attend the same high school and are educated in a similar part-resource / part-general education setting.

Second, six students out of a possible 38 candidates agreed to volunteer for this study. While they may not have understood the study's entire process or purpose, students knew they were being observed and interviewed for a research project. That simple fact may have introduced a level of self-consciousness that influenced their actions in class while being observed or their answers to interview questions. Also, two of the six students have a student-to-teacher classroom relationship with me. Their agreement to participate in this study may have reflected a willingness on their part to please their teacher in hopes of the possibility to earn a better grade in class.

Finally, while I theorized that service-learning provides a practical context for students with E/BD to develop self-determination skills, no actual service-learning component was a part of this research study. A service-learning project outline was used during the think-aloud interviews to gather participant responses to the elements of such a program; but student preferences for that lesson outline may not indicate that students with E/BD would actually develop self-determination skills by participating in service-learning. Other crucial factors of actual service-learning project cycles, such as program quality, partnership support, and continued student effort and input, may affect student outcomes.

Conclusion

Possible limitations considered, I diligently recorded and methodically analyzed the actions and responses of these six student participants. Throughout their varied responses, findings indicated that most students with E/BD may be better served under the tutelage of educators who employ hands-on learning methods, incorporate student voice in the learning process, and value dialog with students as a tool to construct knowledge.

Furthermore, this study demonstrated that, when asked, high school students with E/BD have strong, valid opinions about the ways they learn as well as what they find exciting, engaging, frustrating, and difficult about high school classrooms, curricula, and teachers. In their words and actions throughout the data collection phases, participants expressed quite clearly how they feel about our traditional teaching methods and how we teachers can provide an environment that maximizes the likelihood of their success. Considering the input of these participants, a variety of approaches to learning injected with a healthy dose of student voice will go quite far to increase student engagement and decrease student frustration. Taking this feedback seriously may result in a decrease in inappropriate student behaviors, an additional benefit for all students and school personnel.

But will we listen? Better yet, will we teachers ask our students for their opinions? If we do, I believe students will tell us about their unique strengths and needs as demonstrated in this action research project. Do we dare step outside our classroom comfort zones to utilize student voice to help students with E/BD progress along the path to becoming productive members of our community?

With this population of students who often struggle just to get to school, being in class is not enough. Sitting in a lecture-style classroom, students did not seem to set goals

for their own learning or engage in positive learning outcomes. They disengaged from the group, worked at a different pace, or became dependent on the adults and peers around them to determine their success. Educators must encourage and validate these students by asking for their input and then incorporating student feedback into a variety of learning approaches that include projects and activities inside and outside the classroom.

Service-learning may be one method to do just that and, in the process, promote self-determination skills necessary to students' sustained success as young adults. With increased importance placed on improving math, reading, and writing scores on standardized assessments, however, educators across curricula have learned to prioritize their time and efforts to meet those demands. Although recognized as being important, developing the self-determination skills of these high school students has become, at best, a low priority. Yet, the service-learning cycle is filled with opportunities to develop goal-setting and attainment, problem-solving, and other self-determination skills alongside relevant math, reading, and writing skills in a constructivist academic environment more conducive to the needs of these high school students. As a result, students with E/BD may break free of their marginalized status and become recognized as valuable contributors to their community.

Chapter 6: Self-reflection

For me, this exploration into the value of student voice in building the self-determination skills necessary to successfully navigate life's waters has been a journey fueled by a sense of urgency. At 51 years old, I have been working with high school students with special needs for only three years now. Yet, I look around at the face of a world that changes weekly and ask myself, "Are we preparing students to swim or are we merely keeping them afloat long enough to graduate?" Daily I ponder that question as I silently wail against a high school system designed to meet the needs of a decreasing percentage of today's highly active, technology-savvy, media-driven adolescents.

About ten minutes north of downtown Minneapolis, Minnesota is a first-ring suburban high school that serves approximately 800 ninth- through twelfth-grade students. Located in the least visible area of the school are seven special education classrooms. In and around one of them, I work with students with E/BD with one goal in mind: to help them develop the necessary skills to identify their unique purpose and to use it to make a difference in their world. Unfortunately, this goal is often waylaid by the windstorms that follow students labeled as "behavioral problems" by administrators and teachers. In spite of the best efforts of the few adults pulling for them, they often live up to that reputation.

Pursuing this action research project as culmination of my Master of Arts in Education degree through Augsburg's Weekend College, I sought some kind of validation for an approach to learning that I believed utilized my students' strengths. Service-learning, filled with opportunities for student input, productive dialog, and hands-on activities, may help them get what they need from their high school experience to

transition successfully into their places in the world. For most of these troubled students, high school may be their last best shot.

The findings of my action research project encouraged me. Through four phases of data collection I learned that many of my students would look forward to the variety-filled training ground service-learning can provide. As I had perceived, students with E/BD have untapped potential for learning—it is just packaged in unique, individual, self-destructive containers. If only educators could find ways to tap into that potential without detonating the contents, the chances for success with these students would increase greatly.

To get the most out of their time in high school, I believe students need to participate in co-teaching methods that validate their voice and frequently take them out of the classroom and into their community where learning is accelerated. There they can develop real-time skills as they co-design projects to address identified needs and then plan and work together with interested, caring adults to meet those needs. Within the cycle of service-learning they will have opportunities to make meaningful mistakes—the kind they can learn and grow from without feeling the shameful sting of failure often found in the teacher-led classroom. Instead of worrying about how many wrong answers they got on a pencil and paper math test or how many paragraphs they need in order to get a decent grade on an English essay, students will develop relevant skills on a self-identified, worthwhile project. In the process, they will improve their choice-making, decision-making, and problem-solving abilities. They will learn to control their own lives, checking and balancing these abilities with their disabilities, and working in tangible ways as they give of themselves to their community. In short, they will become productive young adult members of society.

Outside the school walls, there is more room for the unique but valuable efforts of students with E/BD, and there is real return on their giving. So often on the receiving end of life, they may never have experienced what it feels like to truly give of themselves. Along with the tangible benefit of improved life skills comes an intangible benefit that is necessary to moving forward. For these young men and women, this act of personal giving may indeed resuscitate hope in their lives.

From my observations working with students with E/BD over the past three years, their lives resemble more newspaper nightmares than happy endings. Most of them have great difficulty even daring to dream. Asking them to think into the near future in practical ways about such positive things as career aspirations often results in 'I don't know' responses, shoulder shrugs, or silent, uncomfortable stares. This inability to conjure up images of successful lives may account for their daily struggles in school. As each of their classroom teachers explains the value of learning and putting forth effort in school to succeed, these students hear only fantasy. The living color pictures in their minds are firmly grounded in the present where they look for ways to avoid the chaos inside of them or the events of the night before and just get through another day.

Essential reference points that may be present in other students' lives such as reliable adult role models, financial predictability, and unconditional love are often absent in the lives of students with E/BD. That is why their experience in school is so important to their future. If they are to discover their unique purpose and make a difference in their world, we educators must find creative ways to stand in the gap and do what we can to fill their lives with those missing essentials. Guiding and building them up consistently instead of controlling and picking them apart may allow our students to actually believe in their

own worth and may provide the motivation they need to move forward and make positive, purposeful contributions. Offering educational alternatives to suit their needs instead of forcing them to fit into neat little lesson plan packages may give them just such an opportunity to participate more effectively in the learning process and shed the stigma associated with their E/BD label.

More than control, these students need understanding. Structure is a good starting point as long as it is used to help them manage their own behavior and not to keep them from participating in valuable opportunities. With understanding come solid teacher-student relationships, resulting in mutual trust and respect. From there, add appropriate academic rigor and relevance to their lives and all things are possible.

Life has its way of providing consequences for our actions, as students with E/BD know all too well. As stewards of their future, we educators must acknowledge our less-than-successful, antiquated, teacher-led classroom designs and focus our energies on teaching solutions better suited to their success. Failing to equip students with life skills they need to become successful adults may reap societal consequences that perpetuate from generation to generation.

It is said that continuing to do things the same way and expecting different results is one definition of insanity. In my brief time working in a public school teaching and case-managing students with E/BD, I recognize that definition very well. Through trial and error, a few successes and many failures, I have learned that more persistence and creativity is needed on my part to succeed with students. I, for one, am committed to doing that and more.

This action research project was not designed to save the world, but just to improve the lot of a few citizens in a small corner of it. My immediate goal is to partner with available resources and facilitate the service-learning process at this suburban high school with a core group of my students with E/BD. This project has given me renewed hope in my ability to successfully steward my students through the storms of their journey to self-discovery and onto their unique life paths. This project has refreshed my passion for public service and refocused my energies on doing my best to make a difference in the lives of the students under my care.

Notes

[1] The current term, *developmental cognitive disabilities*, is used here in favor of the former term *mental retardation*.

[2] For consistency, *think-aloud* is used throughout the body of this paper, recognizing that researchers have used both a hyphenated and a non-hyphenated version of this term as reflected in the References section.

[3] *White*, a term familiar to high school students, is used here to represent Caucasian or European-American.

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Appendix A: Participant Survey

Participant Number _____ Date _____

Please read questions one through seven below and check the box that best answers each question, adding other information if needed. Remember, all information will be kept confidential.

1. Are you male or female?

- ❒ Male
- ❒ Female

2. What is your age?

- ❒ 14
- ❒ 15
- ❒ 16
- ❒ 17
- ❒ 18
- ❒ 19

3. What is your current grade in high school? (If in an alternative program, what is your current high school grade equivalent?)

- ❒ 9th-grade
- ❒ 10th-grade
- ❒ 11th-grade
- ❒ 12th-grade

4. What is your race or ethnic origin?

- ❒ White
- ❒ White, non-Hispanic
- ❒ African-American
- ❒ Hispanic
- ❒ Asian-Pacific Islander
- ❒ Native American

5. What is your current educational setting?

- ❒ All my classes are in the general education setting.
- ❒ Some of my classes are in the general education setting, and some are in a resource room.
- ❒ Some of my classes are in an alternative learning center, and some are in a resource room.
- ❒ Most of my classes are in a resource room setting.
- ❒ All my classes are in a self-contained classroom.
- ❒ All my classes are in an alternative learning center.

6. With whom do you live?

- ❒ both parents in one home
- ❒ split time between two parents / two homes
- ❒ my mother
- ❒ my father
- ❒ an adult relative
- ❒ my foster family
- ❒ a friend's family
- ❒ other _____

7. What is your total annual household income?

- ❒ less than $10,000
- ❒ $10,000 - $19,999
- ❒ $20,000 - $29,999
- ❒ $30,000 - $39,999
- ❒ $40,000 - $49,999
- ❒ $50,000 - $59,999
- ❒ $60,000 - $69,999
- ❒ $70,000 or more
- ❒ I don't know

Appendix B: Learning Styles Inventory

Participant Number _____ Date _____

Learning styles are simply different approaches or ways of learning. *Visual learners* learn best through seeing, *auditory learners* learn through listening, and *kinesthetic/tactile learners* learn through movement or hands-on activities. You may find one way easier or more enjoyable than another way. By answering the following statements as best as you can, we will have a starting point as to how you prefer to learn.

After each statement below, please check the box that best describes you.

	Often	Sometimes	Hardly Ever
1. I remember more about a subject through lectures with informative explanations and discussions.			
2. I like information to be written on the board, with the use of visual aids and assigned readings.			
3. I like to write things down or take notes for visual review.			
4. I prefer to use posters, models, or actual practice, and I like some activities in class.			
5. I need explanations of diagrams, graphs, or visual directions.			
6. I enjoy working with tools or making models.			
7. I enjoy developing and making charts and graphs.			
8. I can tell if sounds match when presented with pairs of sounds.			
9. I remember best by writing things down several times.			
10. I can understand and follow directions on maps.			
11. I do better at academic subjects by listening to lectures and tapes.			
12. I play with coins or keys in my pockets.			
13. I learn to spell better by repeating the word out loud than by writing the word on paper.			
14. I can better understand a news article by reading about it than by listening to it on the radio.			
15. I chew gum or have a snack during studies.			
16. I feel the best way to remember something is to picture it in my head.			
17. I learn spelling by drawing the word with my finger.			
18. I would rather listen to a good lecture or speech than read about the same material in a textbook.			
19. I am good at completing jigsaw puzzles and mazes.			
20. I grip objects in my hand during class time.			
21. I prefer listening to the news on the radio to reading about it in the newspaper.			
22. I get information on an interesting subject by reading relevant materials.			
23. I feel very comfortable shaking hands, hugging, or doing a physical activity with others.			
24. I follow verbal instructions better than written ones.			

Adapted from Barsch Learning Style Inventory (Jeffrey Barsch, Ed.D.) and Sensory Modality Checklist (Nancy A. Raynie)

Appendix C: Semi-structured Interview Questions

1. Pick a favorite middle school or high school class or two, and describe what you liked about that class or those classes.

2. Let's talk about the things that may frustrate you in your current high school classes or school day.

3. What can we do to teach your core subjects (e.g., English, math, science, and social studies) that would make them more interesting or exciting to you?

4. To sum up our conversation, here's what we've talked about…
   Does that cover everything we've discussed? If not, what did I miss?

Appendix D: Sample Social Studies Lesson Outline 1

Objectives – Students will understand the following:

- Immigration to the United States can be a controversial issue
- Reading fiction and nonfiction books help us better understand the immigrant experience

Materials – Fiction and nonfiction books from school library representing immigrants from various countries

Procedures

Share with students that since Europeans and then others first started coming to this country many have written fiction and nonfiction about the immigrant experience. Similarly, for a long time now, there has been debate about how many if any immigrants should come into the United States each year. The debate, you should explain, will probably continue. Explain that after an initial class discussion, students will read a book related to immigration, will write a review of the book, and will then hold a follow-up discussion on the topic.

Discuss – Lead a discussion that can include both students born in the United States and students who have immigrated here. You might focus the discussion on the following questions:

- Why have people come to the United States in the past?
- Why do people come to the United States today?
- What are the benefits for immigrants and for the country when people from other lands settle here?
- What complications sometimes develop for immigrants and for the country?

Take an informal poll based on the following questions:

- How many students think that the United States today should allow anyone to immigrate?
- How many students think that the United States today should not allow anyone from another land to move here permanently?
- How many students think that the United States should put a quota, or limit, on how many people come here from other places?

Read – Assign a book on immigrants from the library for each student to read, making sure you have a balance of fiction and nonfiction. As they read, have them keep a daily journal, detailing their attitudes toward immigrants and immigration and noting any changes in their views.

Write – Direct each student to write a book review, following one of these outlines:

Fiction	Nonfiction
Introduction ◆ Title, publication date ◆ Opinions from reviews ◆ Awards or prizes Body ◆ Setting, time and place ◆ Character names and descriptions ◆ Plot summary and realism Conclusion ◆ Your overall opinion ◆ Your recommendation, if any	Introduction ◆ Title, publication date ◆ Opinions from reviews ◆ Awards or prizes Body ◆ Discuss author's central message ◆ Evaluate author's support for central message Conclusion ◆ Your overall opinion ◆ Your recommendation, if any

Re-take informal poll and discuss any changes in the results and any controversies that arise.

Adapted by author from a DiscoverySchool.com lesson by Wendy Buchberg and Schuyler Chemung Tioga Boces

Appendix E: Sample Social Studies Lesson Outline 2

Content

- Immigration to the United States
- Process of becoming a citizen
- Resettlement of refugees
- Community involvement

Service Need: To increase tolerance and understanding between cultures. Becoming citizens requires dedication and hard work that deserves to be honored by the community.

Service Idea: Sponsor a citizenship swearing-in ceremony at school in honor of new citizens.

Preparation

- Meet with Immigration and Naturalization Services (INS) and city officials
- Read about countries of origin of people being sworn in
- Plan the event
  - Get food donations
  - Decorate auditorium and lobby
  - Arrange for coverage by educational TV channel

Action

- Set up rooms
- Greet guests
- Interview the new citizens
- Take photographs

Reflection

- Journal writing
- Student-led discussion groups
- Identification of resources for members of these families
- Letter to INS and city to share outcomes as well as ideas for future events

Demonstration

- Compilation of interviews and photos for each family
- Make welcome kits for children of new families
  - Cartoon-style maps of local area
  - Places to go for sports and other entertainment
  - Lists of after-school and weekend activities
  - Small journal or note pad and pen

Student Voice and Choice

- Develop the idea
- Establish partnerships with community
- Organize into committees
- Plan interviews
- Design and make interview / photo albums and welcome kits

Adapted by author from a service-learning project by Cathryn Berger Kaye

Appendix F: Curriculum Interview Think-aloud Protocol Script

"I am interested in what students think about two lesson plans I have, so I want to ask you and other students to review these lesson plans for me and let me listen to what you think about each of them. I am not interested in right or wrong answers. I just want to know what you are thinking about as you read each lesson."

Notice the phrasing is general and honest about my interests and respectful of the contribution each student can make to my lesson plans. Students should not feel the slightest sense of being judged or of having to obtain any particular types of results. Once they do, it affects their behavior and introduces a bias.

Be curious about what students do and why. Also tell the student that you will be recording the session and let him / her know when you turn on the recorder.

"What you say is really important, so I am going to run this digital recorder to make sure that I don't miss anything."

Use a practice task to familiarize each student with thinking aloud while working through a task. First model the process and then ask the student to practice it. (The recorder is not turned on for the practice.)

"Before we begin, let's practice how this works. First, I'm going to think out loud while I read the objective and outline of a lesson plan. That means I'm going to say everything that goes through my mind." (Complete the task while thinking out loud.)

"Now it's your turn to practice. I want you to read the objective and outline for a practice lesson plan and think out loud while you are reading. That means just say everything that goes through your mind. Since this is just for practice, I am not going to use the digital recorder. Do you have any questions about what I want you to do?"

Address any questions as needed to clarify the procedure, and then ask the student to begin. If the student stops thinking out loud for 7 – 10 seconds before reaching the end of the task, use the prompt "Keep talking" as needed to guide the student through the process. When finished with the practice task, ask the student if he / she has any questions about what he / she just did. Address questions and clarify instructions as needed, and then proceed.

"Now I'm going to ask you to read the first lesson plan and think-aloud the same way. Just say everything that goes through your mind while you read the lesson plan. Remember, there are no right or wrong answers. I am only interested in how you are thinking about the tasks in each lesson. Do you have any questions before we begin? (Address questions.) *After you finish thinking out loud through the first lesson plan, we will pause briefly and then begin the second lesson plan. If you are ready, I will turn the recorder on now.* (Begin the recorder, and hand the first lesson to the student.) *Here's the first lesson. You may begin."* (Do the same with the second lesson.)

Adapted by author from a think-aloud script by Christopher Johnstone

Appendix G: Learning Styles Inventory Congregate Results Response Groupings

	Often	Sometimes	Hardly Ever
I remember more about a subject through lectures with informative explanations and discussions. **AU**	D	M B P G S	
I like information to be written on the board, with the use of visual aids and assigned readings. **VI**	B P G D S	M	
I like to write things down or take notes for visual review. **VI**	P	M B G D S	
I prefer to use posters, models, or actual practice, and I like some activities in class. **TK**	M B C D	G S	
I need explanations of diagrams, graphs, or visual directions. **AU**	D	P G S	M B
I enjoy working with tools or making models. **TK**	M B P G	D	S
I enjoy developing and making charts and graphs. **VI**	P D	M B G	S
I can tell if sounds match when presented with pairs of sounds. **AU**	M B P G D S		
I remember best by writing things down several times. **TK**	B P D	M G S	
I can understand and follow directions on maps. **VI**	M B P G D	S	
I do better at academic subjects by listening to lectures and tapes. **AU**	D	B G S	M P
I play with coins or keys in my pockets. **TK**	M P	G D	B S
I learn to spell better by repeating the word out loud than by writing the word on paper. **AU**	P D	M G	B S
I can better understand a news article by reading about it than by listening to it on the radio. **VI**	B	G S	M P D
I chew gum or have a snack during studies. **TK**	P G D S	M B	
I feel the best way to remember something is to picture it in my head. **VI**	M B P S	G D	
I learn spelling by drawing the word with my finger. **TK**		G	M B P D S
I would rather listen to a good lecture or speech than read about the same material in a textbook. **AU**	M B G D S		P
I am good at completing jigsaw puzzles and mazes. **VI**	M B P G D	S	
I grip objects in my hand during class time. **TK**	M D	P G	B S
I prefer listening to the news on the radio to reading about it in the newspaper. **AU**	M D S	B	P G
I get information on an interesting subject by reading relevant materials. **VI**	B P D	M G S	
I feel very comfortable shaking hands, hugging, or doing a physical activity with others. **TK**	M B P G S	D	
I follow verbal instructions better than written ones. **AU**	B D S	M P G	

M=Matthew B=Brian P=Patricia G=Geoff D=Devon S=Shanice

AU = auditory VI = visual TK = tactile / kinesthetic